



SHEET 1 OF 1

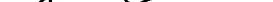
<p>FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE</p> <p>P E</p> <p>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</p> <p>13 2000 13</p> <p>(SEE SEVERAL SHEETS IF NECESSARY)</p>	<p>ATTY. DOCKET NO. GP068-03.CN1</p> <p>APPLICANT BECKER et al.</p> <p>FILING DATE March 10, 2000</p>	<p>SERIAL NO. 09/523,237</p> <p>RECEIVED 3/15 2008</p> <p>GROUP 1643</p> <p>CENTER 1600/2800</p>
--	---	--



U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	

EXAMINER 	DATE CONSIDERED V3/00
---	--------------------------

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE								ATTY. DOCKET NO.	SERIAL NO. 09/523,237
								GP068-03.CN1	Continuation of 08/893,300
INFORMATION DISCLOSURE STATEMENT BY APPLICANT								APPLICANT	
(USE SEVERAL SHEETS IF NECESSARY)								BECKER et al.	
								FILING DATE	GROUP
								March 10, 2000	To Be Assigned

JC558 U.S.P.T.O.
13/10/98
09/523,237

U.S. PATENT DOCUMENTS													
EXAMINER INITIAL		DOCUMENT NUMBER						DATE	NAME		CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
mug		4	7	9	7	3	5	5	1/10/89	Stabinsky			
		4	9	2	5	7	8	5	5/15/90	Wang et al.			
		5	6	4	1	6	2	5	6/24/97	Ecker et al.			
		5	6	4	5	9	8	5	7/08/97	Froehler et al.			
		5	6	5	2	0	9	9	7/29/97	Conrad			
		5	6	5	6	4	2	7	8/12/97	Hammond et al.			
		5	8	0	8	0	2	3	9/15/98	Sanghvi et al.			
		5	8	6	6	3	3	6	2/02/99	Nazarenko et al.			
		5	8	9	8	0	3	1	04/27/99	Crooke et al.			

FOREIGN PATENT DOCUMENTS													
EXAMINER INITIAL		DOCUMENT NUMBER						DATE	COUNTRY		CLASS	SUBCLASS	TRANSLATION
		YES	NO										
mug		0	3	1	8	2	4	5	5/31/89	EPO			
		0	4	1	5	9	0	1	3/6/91	EPO			
		0	4	2	1	7	2	5	04/10/91	EPO			
		0	7	4	2	2	8	7	11/13/96	EPO			
		9	0	1	2	1	1	6	10/18/90	PCT			
		9	0	1	4	4	4	2	11/29/90	PCT			
		9	1	0	8	4	8	0	06/13/91	PCT			
		9	2	0	2	2	5	8	02/20/92	PCT			
		9	3	1	3	1	2	1	07/08/93	PCT			
		9	4	0	2	5	0	1	02/03/94	PCT			
		9	4	1	5	1	6	9	07/21/94	PCT			
		9	4	1	9	0	2	3	09/01/94	PCT			
		9	5	1	4	7	0	6	06/01/95	PCT			
		9	5	2	2	6	2	3	08/24/95	PCT			
		9	5	3	2	3	0	5	11/30/95	PCT			
		9	6	0	6	9	5	0	03/07/96	PCT			

EXAMINER	<i>M. Hall</i>	DATE CONSIDERED
		1/31/00
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.		

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)	ATTY. DOCKET NO.	SERIAL NO. 09/523,237
	GP068-03.CN1	Continuation of 08/893,300
	APPLICANT	
	Becker et al.	
FILING DATE	GROUP	
March 10, 2000	To Be Assigned	

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
<i>ME</i>	<p>Bobst et al., "Effect of the Methylation of the 2'-Hydroxyl Groups in Polyadenylic Acid on its Structure in Weakly Acidic and Neutral Solutions and on its Capability to Form Ordered Complexes with Polyuridylic Acid", <i>J. Mol. Biol.</i>, 46:221-234 (1969)</p>
	<p>Burd et al., "Conserved Structures and Diversity of Functions of RNA-Binding Proteins", <i>Science</i>, 265:615-621 (1994)</p>
	<p>Chiang et al., "Antisense Oligonucleotides Inhibit Intercellular Adhesion Molecule 1 Expression by Two Distinct Mechanisms", <i>J. Biol. Chem.</i>, 266(27):18162-18171 (1991)</p>
	<p>Corey, "48000-fold Acceleration of Hybridization by Chemically Modified Oligonucleotides", <i>J. Am. Chem. Soc.</i>, 117(36):9373-9374 (1995)</p>

EXAMINER <i>Mew</i>	DATE CONSIDERED 1/31/00
------------------------	----------------------------

*EXAMINER: INITIAL IF CITATION CONSIDERED. WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609. DRAW LINE THROUGH

***EXAMINER:** INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. GP068-03.CN1	SERIAL NO. 09/1523, 237 Continuation of 08/893, 300
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Becker et al.	
(USE SEVERAL SHEETS IF NECESSARY)		FILING DATE March 10, 2000	GROUP To Be Assigned

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)		
MJG	Cummins et al., "Characterization of Fully 2'-modified Oligoribonucleotide Hetero- and Homoduplex Hybridization and Nuclease Sensitivity", <i>Nucleic Acids Research</i> , 23(11):2019-2024 (1995)		
	Dean et al., "Inhibition of Protein Kinase C- α Expression in Human A549 Cells by Antisense Oligonucleotides Inhibits Induction of Intercellular Adhesion Molecule 1 (ICAM-1) mRNA by Phorbol Esters", <i>J. Biol. Chem.</i> , 269(23):16416-16426 (1991)		
	Ecker et al., "Pseudo-Half-Knot Formation with RNA", <i>Science</i> , 257:958-961 (1992)		
	Goodchild, "Conjugates of Oligonucleotides and Modified Oligonucleotides: A Review of Their Synthesis and Properties", <i>Bioconjugate Chemistry</i> , 1(3):165-187 (1990)		
	Hou et al., "Inhibition of tRNA Aminoacylation by 2'-O-Methyl Oligonucleotides", <i>Biochemistry</i> , 35(48):15340-15348 (1996)		
	Inoue et al., "Sequence-dependent hydrolysis of RNA using modified oligonucleotide splints and RNase H", <i>FEBS Letter</i> , 215(2):327-330, 1987		
	Inoue et al., "Synthesis and hybridization studies on two complementary nona(2'-O-methyl)ribonucleotides", <i>Nucleic Acids Research</i> , 15(15):6131-6148 (1987)		
MAG 1/31/01	Iribarren et al., "2'-O-Alkyl oligoribonucleotides as antisense probes", <i>Proc. Natl. Acad. Sci. USA</i> , 87:7747-7751 (1990)		
	Knorre et al., "Oligonucleotides Linked to Reactive Groups", <i>Oligodeoxynucleotides</i> , Chpt. 8, pgs. 173-195 (1989)		
	Lammond et al., "Antisense oligonucleotides made of 2'-O-alkylRNA: their properties and applications in RNA biochemistry", <i>FEBS Letter</i> , 325(1,2):123-126 (1993)		
	Leslie et al., "Structure of the Single-stranded Polyribonucleotide Poly(2'-O-methylcytidylic Acid)", <i>J. Mol. Biol.</i> , 119:399-414 (1978)		
	Lesnik et al., "Oligodeoxynucleotides Containing 2'-O-Modified Adenosine: Synthesis and Effects on Stability of DNA:RNA Duplexes", <i>Biochemistry</i> , 32(30):7832-7838 (1993)		
	Markiewicz et al., "The modified nucleosides of tRNAs. II. Synthesis of 2'-O-methylcytidylyl (3'-5'') cytidine", <i>Nucleic Acids Research</i> , 2(6):951-960 (1975)		
	Meinkoth et al., "Hybridization of Nucleic Acids Immobilized on Solid Supports", <i>Analytical Biochemistry</i> , 138:267-284 (1984)		
	Miller et al., "Effects of a Trinucleotide Ethyl Phosphotriester, G ^m p(Et)G ^m p(Et)U, on Mammalian Cells in Culture", <i>Biochemistry</i> , 16(9):1988-1996 (1977)		
	Monia et al., "Evaluation of 2'-Modified Oligonucleotides Containing 2'-Deoxy Gaps as Antisense Inhibitors of Gene Expression", <i>J. Biol. Chem.</i> , 268(19):14514-14522 (1993)		
	Ohtsuka et al., "Studies on Transfer Ribonucleic Acids and Related Compounds. XLI. ¹⁾ Synthesis of tRNA Fragments containing Modified Nucleosides", <i>Chem. Pharm. Bull.</i> , 31(2):513-520 (1983)		
	Pilet et al., "Structural Parameters of Single and Double Stranded Helical Polyribonucleotides", <i>Biochem. Biophys. Res. Comm.</i> , 52(2):517-523 (1973)		
	Sproat et al., "Highly efficient chemical synthesis of 2'-O-methyloligonucleotides and tetrabiotinylated derivatives; novel probes that are resistant to degradation by RNA or DNA specific nucleases", <i>Nucleic Acids Research</i> , 17(9):3373-3386 (1989)		
	Suzuki, "SPKK, a new nucleic acid-binding unit of protein found in histone", <i>EMBOJ</i> , 8:797-804 (1989)		

MAG

1/31/00

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. GP068-03.CN1	SERIAL NO. 09/523,237 Continuation of 08/893,300
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)		APPLICANT Becker et al.	
		FILING DATE March 10, 2000	GROUP To Be Assigned

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
<i>mrg</i>	Thibaudeau et al., "How Does the Electronegativity of the Substituent Dictate the Strength of the Gauche Effect?", <i>J. Am. Chem. Soc.</i> , 116(9):4038-4043 (1994)
	Wei et al., "Hybridization properties of oligodeoxynucleotide pairs bridged by polyarginine peptides", <i>Nucleic Acids Res.</i> , 24(4):655-661 (1996)
	Yamaguchi et al., "Chemical synthesis of the 5'-terminal part bearing cap structure of messenger RNA of cytoplasmic polyhedrosis virus (CPV): m ⁷ G ^{5'} pppAmpG and m ⁷ G ^{5'} pppAmpGpU", <i>Nucleic Acids Res.</i> , 12(6):2939-2954 (1984)
	"Role of the Ribose 2'-Hydroxyl Groups for the Stabilization of the Ordered Structures of Ribonucleic Acid", <i>J. Am. Chem. Soc.</i> , 91(16): 4603-4604 (1969)

EXAMINER <i>Merry</i>	DATE CONSIDERED <i>4/3/00</i>
--------------------------	----------------------------------

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE				ATTY. DOCKET NO. GP068-03.CN1	SERIAL NO. 09/523,237 Continuation of 08/893,300
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)				APPLICANT BECKER et al.	
				FILING DATE March 10, 2000	GROUP To Be Assigned

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
							YES

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)						
<i>me</i>	Blommers et al., "An approach to the structure determination of nucleic acid analogues hybridized to RNA...,"						
	Nucl. Acid. Res., 22(20):4187-4194 (1994).						
	Boiziau et al., "Antisense 2'-O-alkyl oligoribonucleotides are efficient inhibitors of reverse transcription,"						
	Nucl. Acid. Res., 23(1):64-71 (1995).						
	Bonham et al., "An assesment of the antisense properties of RNase H-competent and steric-blocking oligomers,"						
	Nucl. Acid. Res., 23(7):1197-1203 (1995).						
	Conrad et al., "Enzymatic synthesis of 2'-modified nucleic acids: identification of important phosphate...,"						
	Nucl. Acid. Res., 23(11):1845-1853 (1995).						
	Cotten et al., "2'-O-methyl, 2'-O-ethyl oligoribonucleotides and phosphorothioate oligodeoxyribonucleotides...,"						
	Nucl. Acid. Res., 19(10):2629-2635 (1991).						
	Dominski et al., "Identification and Characterization by Antisense Oligonucleotides of Exon and Intron...,"						
	Mol. Cell. Biol., 14(11):7445-7454 (1994).						
	Ecker et al., "Rational screening of oligonucleotide combinatorial libraries for drug discovery,"						
	Nucl. Acid. Res., 21(8):1853-1856 (1993).						
	Johansson et al., "Target-specific arrest of mRNA translation by antisense 2'-O-alkyloligonucleotides,"						
	Nucl. Acid. Res., 22(22):4591-4598 (1994).						

EXAMINER <i>Melvin</i>	DATE CONSIDERED <i>4/3/06</i>
---------------------------	----------------------------------

*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. GP068-03.CN1	SERIAL NO. 09/523,237 Continuation of 08/893,300
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (USE SEVERAL SHEETS IF NECESSARY)		APPLICANT BECKER et al.	
		FILING DATE March 10, 2000	GROUP To Be Assigned

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
<i>Mesri</i>	Kawasaki et al., "Synthesis and Biophysical Studies of 2'-dRIBO-2'-F Modified Oligonucleotides," Presentation/Seminar--ISIS Pharmaceuticals (Jan. 1991).
	Kean et al., "Interactions of oligonucleotide analogs containing methylphosphonate internucleotide linkages...," Nucl. Acid. Res., 22(21):4497-4503 (1994).
	Keller et al., "Synthesis and hybridization properties of oligonucleotides containing 2'-O-modified ribonucleotides," Nucl. Acid. Res., 21(19):4499-4505 (1993).
	Larrouy et al., "RNase H is responsible for the non-specific inhibition of <i>in vitro</i> translation by 2'-O-alkyl ...," Nucl. Acid. Res., 23(17):3434-3440 (1995).
	Shibahara et al., "Site-directed cleavage of RNA," Nucl. Acid. Res., 15(11):4403-4415 (1987).
	Wang et al., "Relative stabilities of triple helices composed of combinations of DNA, RNA and 2'-O-methyl-RNA...," Nucl. Acid. Res., 23(7):1157-1164 (1995).
<i>Mesri</i>	Adams et al., "The Biochemistry of the Nucleic Acids," §7.2.1, 259-260 (11th ed. 1992).
	Sproat et al., "2'-O-Methyloligonucleotides:synthesis and applications," from Eckstein, "Oligonucleotides and Analogues: A Practical Approach," Chapter 3, pgs. 49-86, (1991).
	Uhlmann et al., <i>Chemical Review</i> , 90(4):558 (1990).
	Winnacker, E.L. , "From Genes To Clones," VCH Verlagsgesellschaft, Weinheim, FRG, 33-34 (1987).
EXAMINER <i>Mesri</i>	DATE CONSIDERED 1/31/00
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	